

Features

- Ideal for oil and gas control panel applications
- Drop-in replacement design - compatible with most existing applications which eliminates the need to modify existing designs
- Explosion-proof solenoid options
- Solenoid options with factory sealed leads reduce installation time
- ATEX/IECEX and UL/CSA approved for hazardous locations
- Corrosion Resistant - 316L Stainless Steel valve material makes it ideal for offshore and harsh environments
- Rated for air, inert gas and sweet dry natural gas

Construction

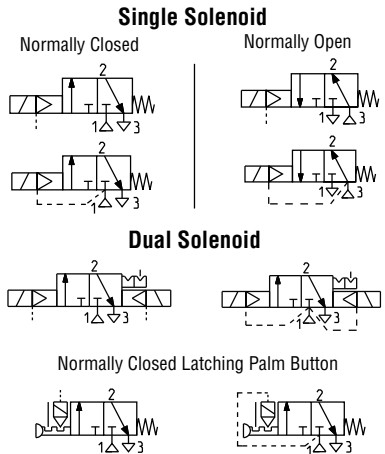
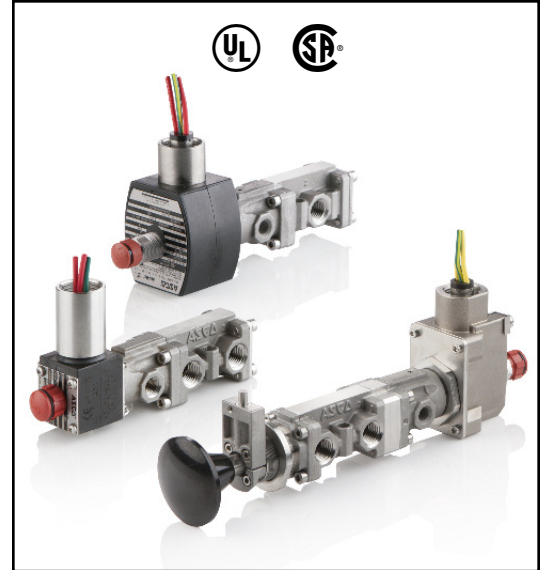
Valve Parts in Contact with Fluids	
Body	316L Stainless Steel
Spring	Ni-Co Alloy
Seals	FKM, LT NBR (Solenoid Only)
Core and Plugnut	430F Stainless Steel
Spool	316L Stainless Steel

Electrical

Coil Options	Insulation Class	Wattage	Spare Coil Part Number
Intrinsically Safe	H	0.48 W	298006
Ultra Low Power	F	0.55 W	274714
Standard Low Power	F	1.4 W	274714
Compact Low Power	F	1.8 W	437962
Standard AC	F	10.1 W	274614
Standard DC	F	11.6 W	274714
Stainless Steel Encapsulated	F	1.8 W	505434

IMPORTANT: Supervisory & leakage current above the drop out current listed will cause improper operation. Consult your local ASCO sales office for additional assistance.

Description	Wattage	Voltage (DC)	Min. Pull In (mA)	Drop Out (mA)	Coil Resistance at 68°F (20°C) (Ohms)
Ultra Low Power	0.55 W	12V	34.0	3.63	255
		24V	17.0	1.80	1025
		48V	8.5	0.91	4080
		125V	3.2	0.34	27,400
Standard Low Power	1.4 W	12 V	83.5	13.9	102
		24 V	42.0	7.0	410
Compact Low Power	1.8 W	12 V	95.0	20.0	80
		24 V	47.0	10.0	320
Stainless Steel Encapsulated	1.8 W	12 V	99.0	18.0	80
		24 V	47.0	10.0	320



Nominal Ambient Temp. Ranges

- Ultra Low Power, and Intrinsically Safe:** -9°F to 149°F (-23°C to 65°C)
Standard Low Power: -9°F to 140°F (-23°C to 60°C)
Compact Low Power: -9°F to 203°F (-23°C to 95°C)
Standard AC: -9°F to 125°F (-23°C to 52°C)
Standard DC: -9°F to 131°F (-23°C to 55°C)
Stainless Steel Encapsulated: -9°F to 194°F (-23°C to 90°C)
 Refer to Engineering Section for details.

Solenoid Enclosures

Standard: Explosionproof and Watertight, Types 4X, 6, and 6P.

Refer to Engineering Section for fluid and temperature compatibility.

Approvals

Solenoid Only:
 UL and CSA Certified for Class I Div. 1 Locations
 ATEX, IECEX: Ex d mb
 ATEX, IECEX: Ex d

Refer to Engineering Section for details.

Important

These solenoid valves are intended for use on clean dry air, inert gas, or sweet dry natural gas filtered to 40 micron or better. The dew point of the media should be at least 10°C (18°F) below the minimum temperature to which any portion of the air, inert gas or sweet dry natural gas system could be exposed to prevent freezing. If lubricated air is used, the lubricants must be compatible with FKM and LT NBR elastomers. Instrument air in compliance with ANSI/ISA Standard 7.0.01-1996 exceeds the above requirements and is, therefore, an acceptable media for these valves.

How to order

8 3 6 4 A 1 0 1 H 1 1 1 1 F 1

Function

- 01 Single Solenoid/Spring Return
- 06 Dual Solenoid
- 23 Latching Palm Button with Solenoid Operated Air Latch Pilot

Construction / Pilot

- 0 Normally Closed / Externally Piloted
- 1 Normally Open / Externally Piloted
- 7 Detent / Externally Piloted
- 8 Normally Closed / Internally Piloted
- 9 Normally Open / Internally Piloted
- G Detent / Internally Piloted

Voltages

- F0 120/60, 110/50 Class F
- F1 24/DC Class F
- F3 12/DC Class F
- H1 24/DC Class H

Electrical Connection Type

H1 1/2" Conduit with 18' Leads Harsh Environment Class I Div 1

Solenoid Type / Orientation

- 1 Compact Low Power (1.8W)
- 2 Low Power (1.4W)
- 3 Stainless Steel Encapsulated (1.8 W)
- 4 Ultra Low Power (0.55W)
- 5 Intrinsically Safe Low Power (0.48W)
- 6 Standard AC (10.1W)
- 7 Standard DC (11.6W)
- A Compact Low Power (1.8W) / 90 Degree Solenoid
- C Low Power (1.4W) / 90 Degree Solenoid
- D Stainless Steel Encapsulated (1.8W) / 90 Degree Solenoid
- E Ultra Low Power (0.55W) / 90 Degree Solenoid
- F Intrinsically Safe Low Power (0.48W) / 90 Degree Solenoid
- G Standard AC (10.1W) / 90 Degree Solenoid
- H Standard DC (11.6W) / 90 Degree Solenoid

**SPECIAL SERVICE
PILOT**

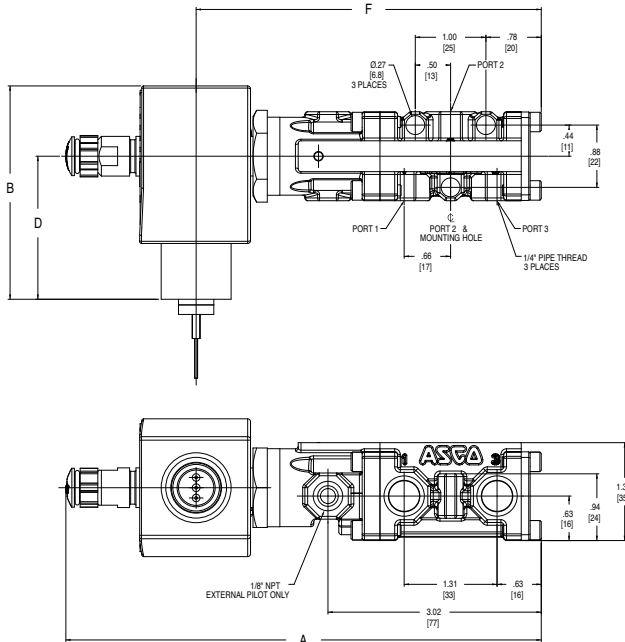
Specifications English units (Metric)

Pipe Size (in)	Pilot Orifice Size (in)	Flow Cv (Kv)	Operating Pressure Differential psi (bar)		External Pilot Pressure psi (bar)		Base Catalog Number ①	Function	Solenoid Orientation	Const. Ref.
			Min.	Max.	Min.	Max.				
Normally Open / Internally Piloted										
1/4	1/16	1.1 (0.95)	18 (1.2)	150 (10) ②	N/A	N/A	8364A101H191_F1	Single Solenoid/Spring Return	Straight	1
1/4	1/16	1.1 (0.95)	18 (1.2)	150 (10) ②	N/A	N/A	8364A101H191_F1	Single Solenoid/Spring Return	90° Solenoid	2
Normally Open / Externally Piloted										
1/4	1/16	1.1 (0.95)	0	200 (13.8)	36 (2.5)	150 (10) ③	8364A101H111_F1	Single Solenoid/Spring Return	Straight	1
1/4	1/16	1.1 (0.95)	0	200 (13.8)	36 (2.5)	150 (10) ③	8364A101H111_F1	Single Solenoid/Spring Return	90° Solenoid	2
Normally Closed / Internally Piloted										
1/4	1/16	1.6 (1.38)	18 (1.2)	150 (10) ②	N/A	N/A	8364A101H181_F1	Single Solenoid/Spring Return	Straight	3
1/4	1/16	1.6 (1.38)	18 (1.2)	150 (10) ②	N/A	N/A	8364A101H181_F1	Single Solenoid/Spring Return	90° Solenoid	4
1/4	1/16	1.6 (1.38)	40 (2.8)	150 (10) ②	N/A	N/A	8364A123H181_F1	Latching Palm Button with Solenoid Operated Air Latch Pilot	Straight	5
1/4	1/16	1.6 (1.38)	40 (2.8)	150 (10) ②	N/A	N/A	8364A123H181_F1	Latching Palm Button with Solenoid Operated Air Latch Pilot	90° Solenoid	6
Normally Closed / Externally Piloted										
1/4	1/16	1.6 (1.38)	0	200 (13.8)	36 (2.5)	150 (10) ③	8364A101H101_F1	Single Solenoid/Spring Return	Straight	3
1/4	1/16	1.6 (1.38)	0	200 (13.8)	36 (2.5)	150 (10) ③	8364A101H101_F1	Single Solenoid/Spring Return	90° Solenoid	4
1/4	1/16	1.6 (1.38)	0	200 (13.8)	40 (2.8)	150 (10) ③	8364A123H101_F1	Latching Palm Button with Solenoid Operated Air Latch Pilot	Straight	5
1/4	1/16	1.6 (1.38)	0	200 (13.8)	40 (2.8)	150 (10) ③	8364A123H101_F1	Latching Palm Button with Solenoid Operated Air Latch Pilot	90° Solenoid	6
Detent Internally Piloted										
1/4	1/16	1.6 (1.38)	15 (1.0)	150 (10) ②	N/A	N/A	8364A106H1G1_F1	Dual Solenoid	Straight	7
1/4	1/16	1.6 (1.38)	15 (1.0)	150 (10) ②	N/A	N/A	8364A106H1G1_F1	Dual Solenoid	90° Solenoid	8
Detent Externally Piloted										
1/4	1/16	1.6 (1.38)	0	200 (13.8)	15 (1.0)	150 (10) ③	8364A106H171_F1	Dual Solenoid	Straight	7
1/4	1/16	1.6 (1.38)	0	200 (13.8)	15 (1.0)	150 (10) ③	8364A106H171_F1	Dual Solenoid	90° Solenoid	8

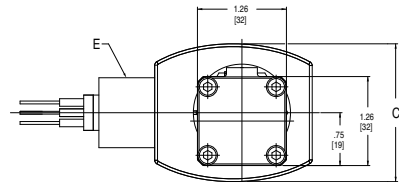
① Base Catalog Numbers are listed as 24 V versions. For 12 V DC, change last digit from a "1" to a "3"
 ② Maximum Operating Pressure for Intrinsically Safe and Ultra Low Power Versions is 130 psi (9 bar) and 200 psi (13.8 bar) for Standard AC
 ③ Maximum Pilot Pressure for Intrinsically Safe and Ultra Low Power Versions is 130 psi (9 bar) and 200 psi (13.8 bar) for Standard AC

Dimensions: inches (mm)

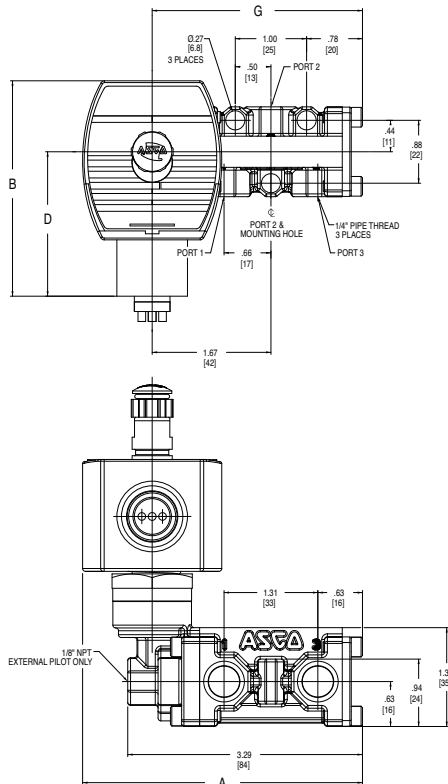
Const. Ref. 1



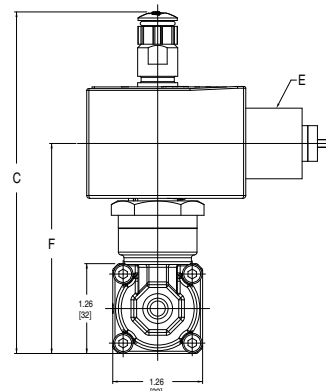
Dimension	Low Power		Compact Low Power		Standard AC/DC		Stainless Steel Encapsulated	
	inch	mm	inch	mm	inch	mm	inch	mm
A	6.7	171	5.5	140	6.3	159	6.7	171
B	3.0	77	2.9	75	3.0	77	3	77
C	2.0	50	1.3	32	2.0	50	2	50
D	2.0	51	2.2	56	2.0	51	2	51
E	1/2" NPT		1/2" NPT		1/2" NPT		1/2" NPT	
F	4.9	124	4.4	111	4.7	120	4.9	124



Const. Ref. 2

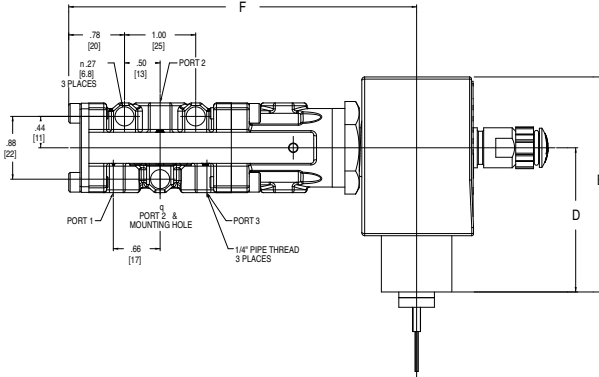


Dimension	Low Power		Compact Low Power		Standard AC/DC		Stainless Steel Encapsulated	
	inch	mm	inch	mm	inch	mm	inch	mm
A	3.9	100	3.6	91	3.9	100	3.9	100
B	3.0	77	2.8	72	3.0	77	3	77
C	4.8	122	3.6	90	4.3	109	4.8	122
D	2.0	51	2.2	56	2.0	51	2	51
E	1/2" NPT		1/2" NPT		1/2" NPT		1/2" NPT	
F	2.9	75	2.4	62	2.8	71	2.9	75
G	3.0	76	3.0	75	3.0	76	2.9	75

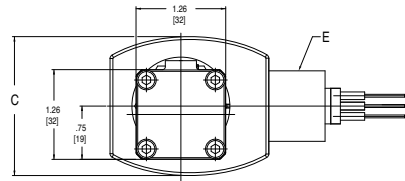
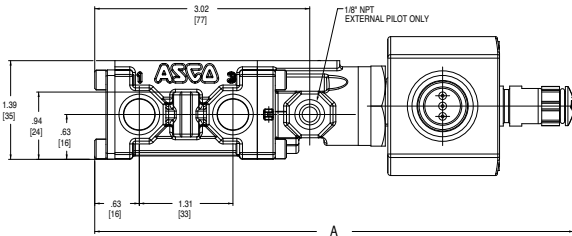


Dimensions: inches (mm)

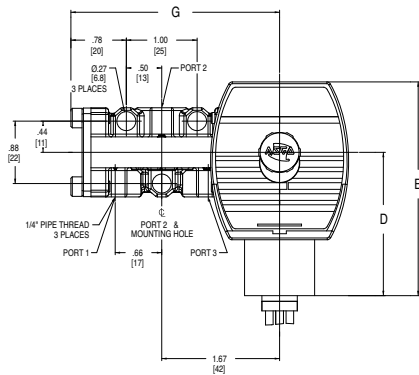
Const. Ref. 3



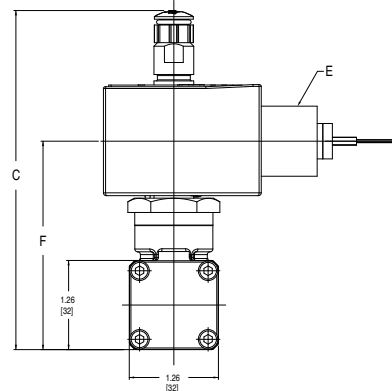
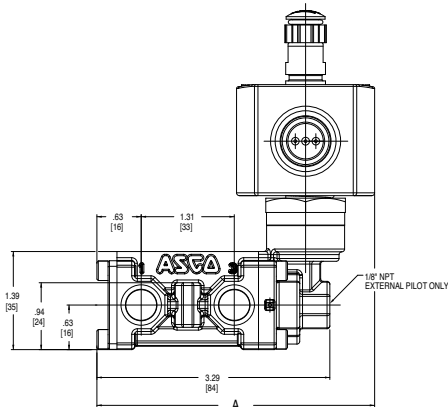
Dimension	Low Power		Compact Low Power		Standard AC/DC		Stainless Steel Encapsulated	
	inch	mm	inch	mm	inch	mm	inch	mm
A	6.7	171	5.5	140	6.3	159	6.7	171
B	3.0	77	2.9	75	3.0	77	3	77
C	2.0	50	1.3	32	2.0	50	2	50
D	2.0	51	2.2	56	2.0	51	2	51
E	1/2" NPT		1/2" NPT		1/2" NPT		1/2" NPT	
F	4.9	124	4.4	111	4.7	119	4.9	124



Const. Ref. 4



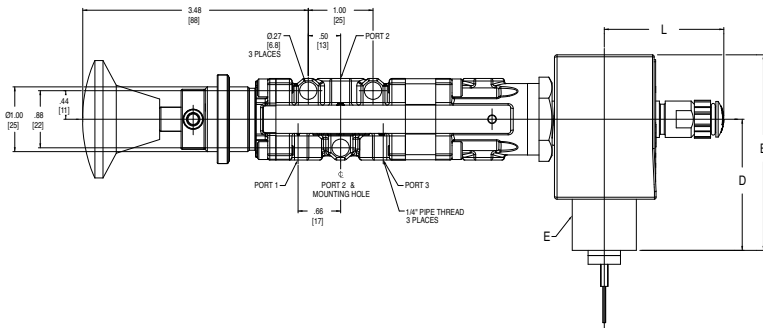
Dimension	Low Power		Compact Low Power		Standard AC/DC		Stainless Steel Encapsulated	
	inch	mm	inch	mm	inch	mm	inch	mm
A	3.9	100	3.6	91	3.9	100	3.9	100
B	3.0	77	2.8	72	3.0	77	3	77
C	4.8	122	3.6	90	4.3	109	4.8	122
D	2.0	51	2.2	56	2.0	51	2	51
E	1/2" NPT		1/2" NPT		1/2" NPT		1/2" NPT	
F	2.9	75	2.4	62	2.8	72	2.9	75
G	3.0	76	3.0	75	3.0	76	2.9	75



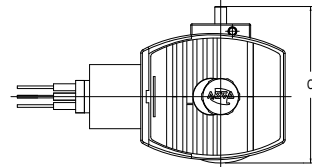
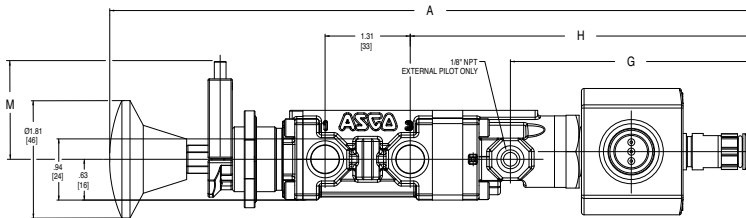
**SPECIAL SERVICE
PILOT**

Dimensions: inches (mm)

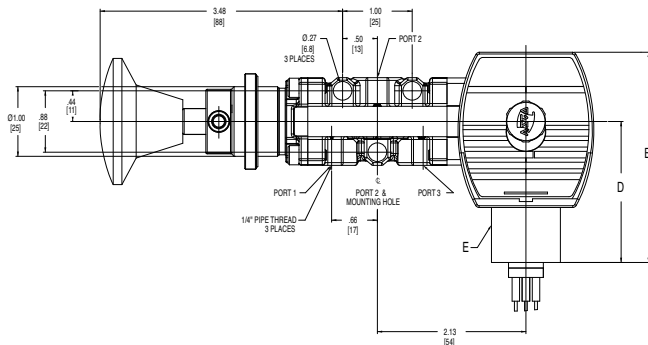
Const. Ref. 5



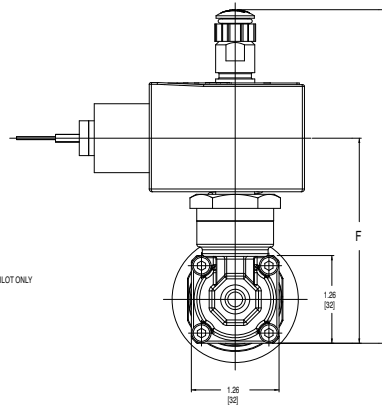
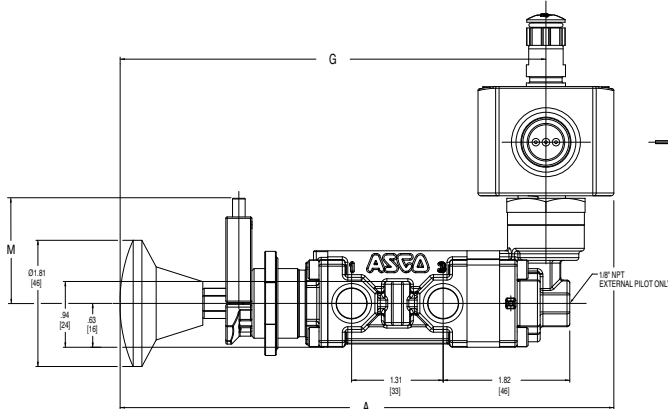
Dimension	Low Power		Compact Low Power		Standard AC/DC		Stainless Steel Encapsulated	
	inch	mm	inch	mm	inch	mm	inch	mm
A	9.9	251	8.7	220	9.4	239	9.9	251
B	3.0	77	2.8	71	3.0	77	3	77
C	2.4	61	3.5	89	2.4	61	2.4	61
D	2.0	51	1.3	32	2.0	51	2	51
E	1/2" NPT		1/2" NPT		1/2" NPT		1/2" NPT	
G	3.7	94	2.5	63	3.2	82	3.7	94
H	5.3	134	4.0	102	4.8	121	5.3	134
L	1.9	47	1.1	28	1.5	39	1.9	47
M	1.5	39	1.5	39	1.5	39	-	-



Const. Ref. 6



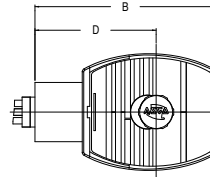
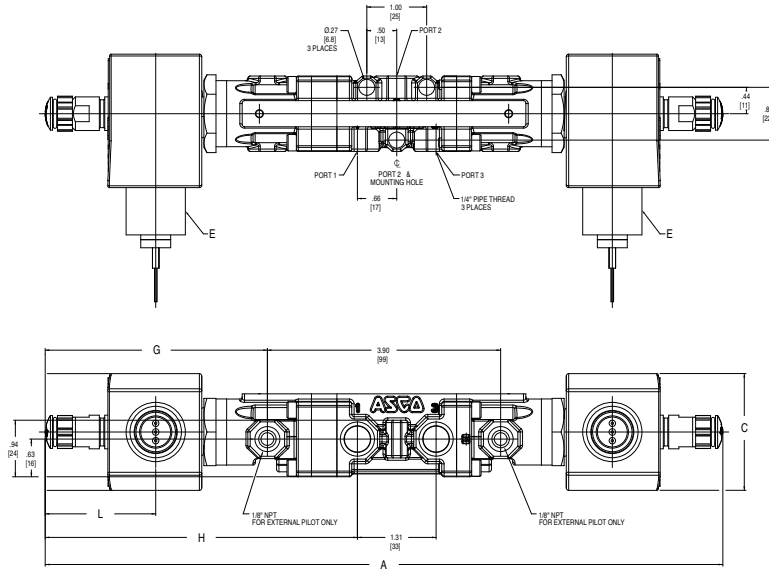
Dimension	Low Power		Compact Low Power		Standard AC/DC		Stainless Steel Encapsulated	
	inch	mm	inch	mm	inch	mm	inch	mm
A	7.1	180	6.7	171	7.1	180	7.1	180
B	3.0	77	2.8	71	3.0	77	3	77
C	4.8	122	3.5	88	4.3	109	4.8	122
D	2.0	51	2.2	56	2.0	51	2	51
E	1/2" NPT		1/2" NPT		1/2" NPT		1/2" NPT	
F	3.0	75	2.4	62	2.8	71	2.9	75
G	6.0	151	6.0	151	6.0	151	6.1	155
M	1.5	39	1.5	39	1.5	39	-	-



Dimensions: inches (mm)

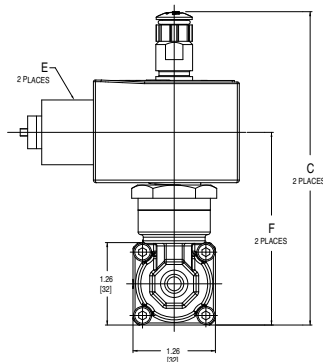
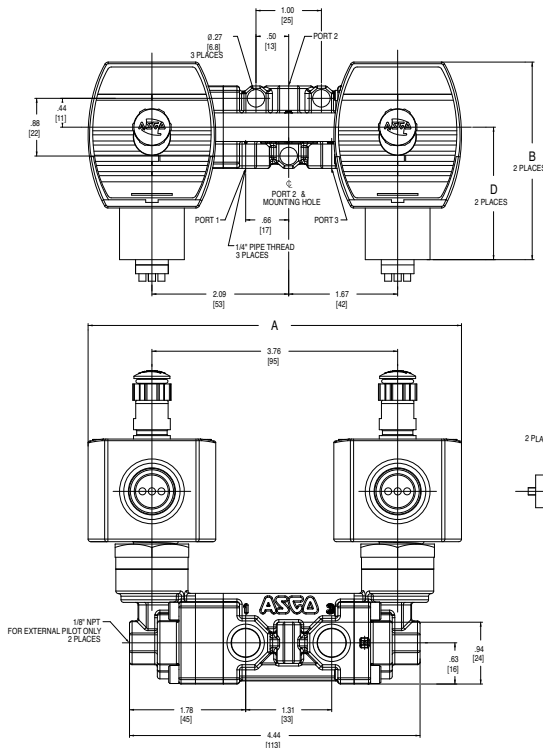
Const. Ref. 7

Dimension	Low Power		Compact Low Power		Standard AC/DC		Stainless Steel Encapsulated	
	inch	mm	inch	mm	inch	mm	inch	mm
A	11.3	288	8.9	225	10.4	263	11.3	288
B	3.0	77	2.9	75	3.0	77	3	77
C	2.0	50	2.9	75	2.0	50	2	50
D	2.0	51	2.2	56	2.0	51	2	51
E	1/2" NPT		1/2" NPT		1/2" NPT		1/2" NPT	
G	3.7	94	2.5	63	3.2	82	3.7	94
H	5.2	133	4.0	101	4.7	120	5.2	133
L	1.8	47	1.1	28	1.5	39	1.8	47



Const. Ref. 8

Dimension	Low Power		Compact Low Power		Standard AC/DC		Stainless Steel Encapsulated	
	inch	mm	inch	mm	inch	mm	inch	mm
A	5.7	145	5.0	127	5.7	145	5.7	145
B	3.0	77	2.8	72	3.0	77	3	77
C	4.8	122	3.6	90	4.3	109	4.8	122
D	2.0	51	2.2	56	2.0	51	2	51
E	1/2" NPT		1/2" NPT		1/2" NPT		1/2" NPT	
F	3.0	75	2.4	62	2.8	71	2.9	75



SPECIAL SERVICE
PILOT